DOCUMENT RESUME

ED 319 804 TM 015 108

AUTHOR Boser, Judith A.; Clark, Sheldon B.
TITLE Consensus on Desirable Characteristics of Mail Questionnaires: Illusion or Reality?
PUB DATE Apr 90
NOTE 23p.; Paper presented at the Annual Meeting of the American Educational Research Association (Boston, MA, April 16-20, 1990).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Attitude Measures; *Item Analysis; Likert Scales; *Mail Surveys; Methods Research; Multiple Choice Tests; *Questionnaires; *Researchers; Test Format
IDENTIFIERS *Consensus; *Experts; Item Position (Tests)

ABSTRACT

This study of survey research experts was conducted to determine desirable characteristics of mail questionnaires. The 82-item Likert-scale instrument used in the study covered general appearance, instructions, choice of items, choice of response options, wording, order of items, and item format. The instrument was administered to: 8 subjects who participated in a study in which the instrument was developed, and 12 other experts (10 of whom functioned as a validation panel). For the eight early participants, reasons were elicited regarding circumstances under which they would use certain types of items that they indicated would only be used "sometimes". Frequency distributions were prepared for all items for the original group of participants and for the validation panel. Results indicate that while there are some mail questionnaire recommendations that could usually be made with some degree of confidence, there are other aspects of questionnaire design that are less commonly accepted and, hence, dependent upon researcher knowledge and experience, information sought, population characteristics, and circumstances. The survey questionnaire used is included. (TJH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED319804

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

JUDITH A. BOSER

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Consensus on Desirable Characteristics of Mail Questionnaires: Illusion or Reality?

by

Judith A. Boser
Bureau of Educational Research and Service
The University of Tennessee
212 Claxton Education Building
Knoxville, TN 37996-3400

Sheldon B. Clark
Science/Engineering Education Division
Oak Ridge Associated Universities
P.O. Box 117
Oak Ridge, TN 37831-0117

Paper Presented at the Annual Meeting of
the American Educational Research Association
Boston, Massachusetts
April 16-20, 1990

TM015108

BEST COPY AVAILABLE

Consensus on Desirable Characteristics of Mail Questionnaires: Illusion or Reality?

Objectives

The purpose of the present study was to determine if agreement could be found among survey research experts regarding desirable characteristics of mail questionnaires when they rated those characteristics as ones they would recommend usually, some of the time, or seldom. For items that would not usually be recommended, there was interest in determining the circumstances under which they would be applicable. A second purpose was to determine if a second group of survey researchers (termed the "validation group" in this paper) would support the findings of the group of experts who might conceivably have been biased by their participation in a previous similar study.

Background

Recent research directed toward finding a set of desirable characteristics of mail questionnaires that would be endorsed by a group of survey research experts did not obtain its objective (Clark & Boser, 1989). A list of 83 characteristics of mail questionnaires was compiled from published sources on survey research. In a prior study this list was submitted to a sample of experts for rating, but only eight of the 83 items found total acceptance. Some items lacked clarity, as indicated by participant comments. There were two items that none of the participants would recommend for all mail questionnaires.

Comments emanating from the first study had led the researchers to the conclusion that the poles of the initial response categories ("all" and "none") may have been too extreme, causing participants to reject them for the only other available option, "some" ("recommended for some but not all mail surveys") if they thought of one or more applications for which the recommendation would or would not be made. Limitations of the instrument were thus considered as a possible factor contributing to the lack of consensus among the experts. This concern led to revisions of the instrument. The response option from the original study of "all" ("recommended for all mail survey questionnaires") was broadened to "usually=usually or always recommended" while the other extreme, originally stated as "none" ("not recommended"), was revised to become "seldom=seldom or never recommended." The middle category of "some" ("recommended for some but not all mail questionnaires") was changed only to reflect the tone and phrasing of the new response options, becoming "sometimes=sometimes recommended for mail survey questionnaires." For the original participants, each section of the revised questionnaire was followed by a request for the participant to clarify responses of "sometimes" or "seldom" by delineating the circumstances under which that item would be applicable.

Almost all of the items from the original (Clark & Boser, 1989) study were used in the current study. Four of the five items which had caused confusion to participants in the previous study were rewritten in an effort to clarify them, and the fifth such item was deleted.

Method

Subjects

Phase 1. The 11 participants in the previous study (Clark & Boser, 1989) were given an opportunity for continued involvement in the project. It was recognized that there was a possibility that participation in the first phase of the study and knowledge of the results of the first study might bias responses of members of the original study group, so a second sample, the validation sample, was selected.

Phase 2. A group size of 10 was deemed desirable for the validation panel. Oversampling was initiated by sending questionnaires to 15 individuals to obtain 10 participants for the validation panel. The 15 individuals had backgrounds in survey research, as did those in the original survey, but had not participated in the first study.

Instrument

The revised instrument contained 82 items in seven categories: general appearance (14 items), instructions (8 items), choice of items (7 items), choice of response options (10 items), wording (12 items), order of items (15 items), and item format (16 items). For the original participants (Phase 1), following each section of items (a section contained items of one of the seven types), participants were asked to indicate the circumstances or types of surveys in which items rated as "sometimes" would be recommended. If there was not sufficient blank space at the bottom of the page, the facing page was left blank for this purpose. Participants in Phase 2, the validation study, were not asked to explain or list circumstances relevant to items they had rated as "sometimes."

Questionnaires for Phase 1 participants were duplicated on blue legal size paper that was stapled in the middle to form a booklet. Because of the additional space required for explanatory comments, the questionnaire had 12 pages. Questionnaires for Phase 2 participants were green and required only eight pages because the spaces for explanations were not needed.

Participants

The respondents in Phase 1 consisted of eight individuals, all of whom had participated in the previous research effort (Clark & Boser, 1989) and had either published books on survey methodology or reported on studies investigating survey research methodology at national professional conferences. Two other participants indicated they thought their responses would be biased by their participation in the initial study and declined to participate. One of them recommended a colleague to participate in his place, and the other forwarded his questionnaire to a colleague. Both recommended individuals became part of the validation group. Only one of the original 11 participants failed to respond in any manner.

The respondents in the validation group (Phase 2) consisted of the first 10 individuals (from the 15 sent questionnaires) who returned completed questionnaires. In all, a total of 12 from the validation sample returned the survey instruments without benefit of follow-ups. Background information was provided by nine of the 10 validation panel members.

For the validation group, experience in survey research activities varied from five to 30 years, with a median of 13 years. Participants had been involved in conducting from none (n=1) to eight (n=1) mail surveys in 1988, with a mean of three. Five of the nine participants indicated 1988 was typical of their survey activities, but the remaining four indicated they were usually more active in survey research. Eight of the nine had conducted and reported studies of survey or questionnaire methodology, and four had published articles or books on survey methodology. Eight of the 10 individuals were involved in institutional or organizational research, and five of them limited their activities to this type. Other types of survey research included public opinion (n=2), consumer (n=1) and social science (n=1). Populations surveyed included members of organizations (n=5), program participants (n=5), alumni (n=4), and the general public (n=3). Seven of the 10 were college/university faculty members, with three employed by research institutes within their institutions. Two individuals were employed by research divisions or sections in large organizations, and one individual was in a public school research division.

Procedures

Survey forms, cover letters and postage-paid return envelopes (along with previously promised copies of the results of the first survey) were mailed to the original 11 participants in April. The cover letter emphasized the change in response options. One follow-up mailing, containing a letter, a replacement copy of the questionnaire and a stamped, addressed return envelope, was sent approximately one month later, Completed survey instruments were received from eight of the 11 original participants (73 percent).

Survey forms, cover letters and postage-paid return envelopes were mailed to the 15 individuals selected for the validation sample in mid-June. Responses from 12 of them constituted an 80 percent response rate.

Analysis

Frequency distributions were prepared for all items for the original group participants in Phase 1 and for the validation panel in Phase 2. Explanatory comments listing special circumstances in which practices would sometimes be recommended were noted for items on which there was not total agreement by participants in the original group (Phase 1).

Items were listed in four groups, based on responses of the original group: items on which all who responded marked the item as "usually" recommended, items on which all but one who responded marked the item as "usually" recommended, items on which all but two who responded

marked the item as "usually" recommended, and the items that lacked general acceptance as usual practices.

After items were grouped according to responses by the original participants, the percentage of validation panel members who would "usually" recommend each item was calculated. If an item was "usually" recommended by 80 percent or more of the validation panel, the item was considered to have been supported.

Results and Discussion

Frequency distributions for each item for the original participants and the validation panel are appended. On 26 of the 82 items (32 percent), all eight of the original participants agreed that they would "usually" recommend the item for mail survey questionnaires. And on another 8 items, all of those responding to the item (n=6 or n=7) rated the items as usually recommended. Those items are listed below.

On 25 of the 34 items, the validation panel agreed at the 80 percent level or higher. Those items appear in bold-face type in the list that follows. Those items not in bold-face type were supported by fewer than 80 percent of the validation panel.

Items Recommended by All of Original Group

A. GENERAL APPEARANCE

1. The title of the study/questionnaire is likely to appeal to the survey population.
2. Instrument looks easy to complete.
6. Type is clear and legible.
11. Appreciation for completing the instrument is expressed.

9a. The front page (or cover) contains the study/instrument title, prominently displayed.

B. INSTRUCTIONS

2. Instructions are brief.
3a. Instructions are clear: They specify when to put a check mark and when to write in a response.
3b. Instructions are clear: They indicate whether multiple responses are allowed.

6. If items appear on both sides of the page, an indication is given that the instrument continues on the reverse side (e.g., "please turn over").

C. CHOICE OF ITEMS

2. Each item seeks just one piece of information.
3. All items are essential and relevant to the purposes of the survey.
4b. For items used for skip/filter/screen purposes, instructions are few and simple.

Items Recommended by All of Original Group (continued)

D. CHOICE OF RESPONSE OPTIONS

1a. Response options exhaust all possibilities or include "other," "undecided," or "neutral" category.
1d. Response options do not contain more than one alternative that could be correct unless multiple responses are allowed.
1g. Response options are appropriate for the item.

1f. Response options are brief.
2b. Items with Likert-type response options use a balanced scale. (n=7)

E. WORDING

1. The choice of words is appropriate to the literacy level of the survey population.
3d. Items are simple, direct, and unambiguous. They do not contain instances of double negatives in items and/or response options. (n=7)
3e. Items are simple, direct, and unambiguous. They do not contain instances of negatively worded items coupled with agree/disagree response format. (n=7)

F. ORDER OF ITEMS

1b. The initial items are applicable to all members of the survey population.
1d. The initial items are nonthreatening.
1e. The initial items are interesting.
5. If reference is made to a previous item, that item appears on the same page or on the facing page.
6. Items with similar content are grouped together; within each content group, items with the same response format are presented together.

1a. The initial items are clearly connected to the stated purpose of the survey.
4. Classification or demographic information is solicited at the end of the instrument unless needed for screening purposes.
7b. Within a topic/content area, the items progress from most familiar to least familiar.
7c. Within a topic/content area, the items progress from least objectionable to most objectionable.

G. ITEM FORMAT

8. Response options are arranged vertically (or in columns if several consecutive items use the same response options). (n=6)
9. Response options are close to the item stem. (n=7)
11. There is adequate space for responding. (n=7)
13. When ranking, the number of items to be ranked is limited (e.g., three best and three worst). (n=5)

10. The space for responding to items is on the same side of the page throughout the instrument. (n=6)

On another 18 items, only one of the original participants rated the item as "sometimes" or "seldom," while the rest accorded it the "usually" rating. Comments or special circumstances from those original participants are shown in italics to the right of the item.

Using the same 80 percent agreement, 12 of these items were supported by the validation sample and are again shown in bold-face type.

Items Usually Recommended by All But One of Original Group

Item		Circumstances/Comments
A3.	**Margins are adequate; instrument doesn't look crowded.**	*Crowding preferable to longer instrument.*
A5.	**Printing does not bleed through the paper.**	
A8.	There are not too many variations in size and style of type.	*Interesting, varied format may add appeal for children, teens, or specialized audiences.*
B5.	**The tone of the directions is polite (e.g., "please").**	
C1.	**The respondent is able to provide answers to the questions in the instrument.**	*Person should have the knowledge; sometimes opinions of naive persons sought (although they don't feel able to provide the answers).*
C4c.	For items used for skip/filter/screen purposes, instructions appear immediately after the response options. (n=6)	
D1b.	**Response options are mutually exclusive.**	*Except items with"check all that apply."*
E3b.	**Items are simple, direct, and unambiguous. They do not contain instances of "loaded" items (that use emotionally colored words). (n=6)**	*Such words are appropriate in attitude surveys.*
E3c.	Items are simple, direct, and unambiguous. They do not contain instances of assumption of an existing state of affairs (e.g., "Do you still...").	NOTE: Wording of this item was confusing to some participants.
E3g.	**Items are simple, direct, and unambiguous. They do not contain instances of "giveaway" words (e.g., "all").**	NOTE: Wording of this item was confusing to some participants.
F1c.	**The initial items are easy. (n=6)**	*More important that initial items be interesting if there are no items that are both interesting and easy.*
F7d.	**Within a topic/content area, the items progress from objective to subjective.**	*No clear agreement on this.*

Items Usually Recommended by All But One of Original Group (continued)

Item		Circumstances/Comments
F8.	**Items that require recall are organized by logical time sequence. (n=6)**	*No clear agreement on this.*
G2.	If necessary, either sublettering (e.g., 4a, 4b, 4c) or numbering by sections (i.e., starting each section with item 1) is used to limit the apparent number of items.	
G3.	**Each item and its response options are on the same page.**	*Long items (25 Likert items) may not fit on a page.*
G4.	Statements or questions, rather than phrases, are used in collecting demographic information (e.g., "How old were you on your last birthday?" instead of "Age."). (n=6)	*Level of detail needed and literacy of reader must be considered.*
G14b.	**For checklists, column headings are carried over from one page to another. (n=6)**	*Better not to have to carry over to second page.*
G14c.	For checklists, column headings are presented parallel, rather than perpendicular, to the item stem. (n=5)	*There may be too many options at times.*

For the following 12 items, all but two of the original group agreed that they should be recommended. Only one of the items, G7, was validated at the 80 percent level.

Items Usually Recommended by All But Two of Original Group

Item		Circumstances/Comments
A7.	Size and style of type used for headings is consistent throughout the instrument. Consistency is also evident for items and response options.	
A9b.	The front page (or cover) contains general directions.	*Preferably in cover letter.*
B4.	Instructions are visually different from the body of the instrument (e.g., in size and/or style of type).	
D1e.	Response options include both sides of issue or question.	*Both or neither: some issues may have more than two viewpoints*
E2.	Both sides of issue (or neither side) are included in the item stem.	*There may be more than two sides. Some items may focus on one side of an issue.*
E3f.	Items are simple, direct, and unambiguous. They do not contain instances of qualifying clauses, especially at end of stem.	NOTE. Wording of this item was confusing to some participants.
E3i.	Items are simple, direct, and unambiguous. They do not contain instances of vague terminology (e.g., "the country," "just," "fair," "you").	*Many of the terms acceptable for response categories. This statement doesn't specify what part of the item the words are to be omitted from.*
F7a.	Within a topic/content area, the items progress from general to specific.	*Sometimes may not care if earlier responses influence summary item. No clear agreement.*
G1.	Items are numbered with Arabic numerals. (n =5)	
G5.	If an item stem requires two or more lines, the second and subsequent lines are indented. (n=5)	
G7.	**When response options are provided (including, if appropriate, a response option of "other"), each response option has either a numeric or alphabetic code beside it.** (n=5)	*Recommended to facilitate computer data entry. Otherwise checking beside or circling response may be acceptable.*
G12.	Open-ended items are used sparingly. (n=5)	*If most likely responses are known.*

The following items appear to be more controversial or highly situational, or the items in this study were not clearly written. These items would not be included among a generic list of questionnaire characteristics. Some of the circumstances are listed.

Non-Generic, or Situation-Specific Items

Item		Circumstances/Comments
A4.	Paper is white or light-colored with dark ink.	*Brighter colors, varied formats may be more appealing to children, teens, specific audiences.*
A9c.	The front page (or cover) contains the name of the sponsor.	*Some prefer this in cover letter. Response rate may be lower if very personal/confidential information sought.*
A9d.	The front page (or cover) contains the address of the sponsor.	*Some prefer this in cover letter or at end of questionnaire. Complete address not needed in organization survey.*
A10.	For a multi-page questionnaire, the back page does not contain items but may be used for comments.	*Use for questions if needed rather than adding pages. Less important if comments have been sought throughout the questionnaire.*
B1.	General instructions that apply to the entire instrument are provided at the beginning of the instrument.	
B3c.	Instructions are clear. They provide guidance for expected length of open-ended responses.	*If there is a need to limit length. Available space is an indicator.*
C4a.	For items used for skip/filter/screen purposes, the use of this type is justified.	*One justification is to shorten the overall questionnaire. Avoid when possible in mail surveys.*
C4d.	For items used for skip/filter/screen purposes items pertaining to only some of the respondents are indented beneath the filter question.	*This format may be less appropriate for map-like or flowchart-based formats.*
D1c.	Response options include a "don't know" option.	*Some prefer to force respondents to make a choice.*

Non-Generic, or Situation-Specific Items (continued)

Item		Circumstances/Comments
D2a.	Items with Likert-type response options have an appropriately labeled midpoint.	*Some prefer not to include a midpoint or to label only the end points.*
D3.	Sensitive information (e.g., age, salary) is collected using ranges for response options	*Unless interval level data needed. Ranges may be preferable if anonymity or confidentiality is a concern.*
E3a.	Items are simple, direct, and unambiguous. They do not contain instances of jargon, technical terms, or uncommon abbreviations.	*Technical terms can be used if those in the sample would be familiar with them (engineering terms for a survey of engineers).*
E3h.	Items are simple, direct, and unambiguous. They do not contain instances of inexact words or phrases (e.g., "any," "most," "several," "usually," "often," "regularly," "much the same").	*These are acceptable response categories, and this item doesn't state whether these words are to be omitted from the stem or response.*
E3j.	Items are simple, direct, and unambiguous. They do not contain instances of the word "questionnaire" or "checklist" in heading or text.	
F2.	If there are any sensitive or difficult items, they appear in the middle or near the end of the instrument, but not at the very end.	*All items may be sensitive. Place at end unless critical to study (more commitment to answer because of time already spent on the questionnaire).*
F3.	Open-ended items appear last.	*Should follow items if used to clarify or expand responses to them.*
G6.	The respondent is asked to circle or underline responses.	*Except when listing responses might influence respondents or when possible responses cannot be predicted.*
G14a.	For checklists, if long, a line is skipped after every three to six items.	*May not be needed if items go across most of the page or if there is sufficient space between items.*

There was much less agreement on the use of items in section G than in other sections. There was also more reluctance to rate the items in that section, possibly indicating confusion over the items themselves.

Summary

There were 34 items on which all (or all who rated the item) of the original panel agreed that they would usually recommend. For 25 of those items, there was 80 percent or higher support from the validation panel that the items should be included in a list of recommendations usually made in mail surveys. Of the 18 items on which all but one of the original panel supported, 12 of the validation panel provided support. And on the 12 items on which all but two of the original panel would usually recommend, only one of the items was supported by the validation panel. In summary, of the 64 items which a majority of the original participants would usually recommend, 38 of them were supported by the validation group at the 80 percent or higher level indicating they also would usually make the recommendation. As consensus declined within the original participants, the support of the validation group also declined.

There are 18 items from the instrument that appear to be recommendations that would be made only in certain circumstances or were poorly written and confusing to participants. In a few cases, participants indicated they would be more likely not to make such a recommendation than to make it.

The method of analysis for these data was arbitrary. The level-of-agreement criterion for the original participants (i.e., all but two or fewer agreeing the recommendation would usually be made) and the 80 percent criterion for the validation panel may be too lenient. The comments from the original sample regarding items that are situation-specific or confusing in themselves may lead to improvement of the wording or intent of some items and the acceptance that there are conditions under which others are applicable.

Based on this and the previous research, it appears that while there are some mail questionnaire recommendations that could usually be made with some degree of confidence, there are other aspects of questionnaire design that are less commonly accepted, and their proper use may depend on the experience and knowledge of the researcher regarding not only questionnaire design but also the population to be surveyed, the information sought, and the circumstances. In other words, questionnaire design may be a science only up to a certain point; beyond that point it is an art, and it would appear that point is reached somewhere prior to questionnaire design completion.

Reference

Clark, S. B., & Boser, J. A. (1989, March). Seeking consensus on empirical characteristics of effective mail questionnaires: A first step. Paper presented at the annual meeting of the American Educational Research Association, San Francisco. (ERIC Document Reproduction Service No. ED 306 305)

Percentage Distribution of Responses for Original-Participant and Validation Groups

	-----Original Participant Group (N=8)-----				--------Validation Group (N=10)-------			
Item Code	Usually	Sometimes	Seldom	No Resp.	Usually	Sometimes	Seldom	No Resp.
General Appearance								
A1	100.0%	0.0%	0.0%	0.0%	80.0%	10.0%	0.0%	10.0%
A2	100.0%	0.0%	0.0%	0.0%	90.0%	10.0%	0.0%	0.0%
A3	87.5%	12.5%	0.0%	0.0%	90.0%	10.0%	0.0%	0.0%
A4	62.5%	37.5%	0.0%	0.0%	40.0%	50.0%	10.0%	0.0%
A5	87.5%	12.5%	0.0%	0.0%	80.0%	10.0%	10.0%	0.0%
A6	100.0%	0.0%	0.0%	0.0%	90.0%	10.0%	0.0%	0.0%
A7	75.0%	25.0%	0.0%	0.0%	60.0%	30.0%	0.0%	10.0%
A8	87.5%	12.5%	0.0%	0.0%	60.0%	30.0%	0.0%	10.0%
A9a	100.0%	0.0%	0.0%	0.0%	70.0%	20.0%	10.0%	0.0%
A9b	75.0%	12.5%	12.5%	0.0%	70.0%	20.0%	10.0%	0.0%
A9c	50.0%	37.5%	12.5%	0.0%	60.0%	20.0%	20.0%	0.0%
A9d	12.5%	75.0%	12.5%	0.0%	30.0%	50.0%	20.0%	0.0%
A10	25.0%	50.0%	25.0%	0.0%	10.0%	40.0%	40.0%	10.0%
A11	100.0%	0.0%	0.0%	0.0%	80.0%	10.0%	0.0%	10.0%
Instructions								
B1	62.5%	12.5%	25.0%	0.0%	60.0%	30.0%	10.0%	0.0%
B2	100.0%	0.0%	0.0%	0.0%	80.0%	20.0%	0.0%	0.0%
B3a	100.0%	0.0%	0.0%	0.0%	80.0%	20.0%	0.0%	0.0%
B3b	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
B3c	37.5%	37.5%	25.0%	0.0%	40.0%	50.0%	10.0%	0.0%
B4	75.0%	25.0%	0.0%	0.0%	40.0%	60.0%	0.0%	0.0%
B5	87.5%	0.0%	12.5%	0.0%	80.0%	20.0%	0.0%	0.0%
B6	100.0%	0.0%	0.0%	0.0%	70.0%	30.0%	0.0%	0.0%
Choice of Items								
C1	87.5%	12.5%	0.0%	0.0%	80.0%	10.0%	0.0%	10.0%
C2	100.0%	0.0%	0.0%	0.0%	90.0%	10.0%	0.0%	0.0%
C3	100.0%	0.0%	0.0%	0.0%	90.0%	10.0%	0.0%	0.0%
C4a	62.5%	12.5%	25.0%	0.0%	60.0%	10.0%	10.0%	20.0%
C4b	100.0%	0.0%	0.0%	0.0%	90.0%	10.0%	0.0%	0.0%
C4c	75.0%	12.5%	0.0%	12.5%	60.0%	30.0%	10.0%	0.0%
C4d	62.5%	37.5%	0.0%	0.0%	60.0%	30.0%	10.0%	0.0%
Choice of Response Options								
D1a	100.0%	0.0%	0.0%	0.0%	80.0%	10.0%	10.0%	0.0%
D1b	87.5%	12.5%	0.0%	0.0%	90.0%	10.0%	0.0%	0.0%
D1c	25.0%	75.0%	0.0%	0.0%	20.0%	70.0%	10.0%	0.0%
D1d	100.0%	0.0%	0.0%	0.0%	90.0%	10.0%	0.0%	0.0%
D1e	75.0%	25.0%	0.0%	0.0%	60.0%	30.0%	10.0%	0.0%
D1f	100.0%	0.0%	0.0%	0.0%	70.0%	30.0%	0.0%	0.0%
D1g	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
D2a	37.5%	50.0%	12.5%	0.0%	50.0%	30.0%	20.0%	0.0%
D2b	87.5%	0.0%	0.0%	12.5%	70.0%	30.0%	0.0%	0.0%
D3	37.5%	62.5%	0.0%	0.0%	60.0%	40.0%	0.0%	0.0%

Percentage Distribution of Responses for Original-Participant and Validation Groups

	Original Participant Group (N=8)				Validation Group (N=10)			
Item Code	Usually	Sometimes	Seldom	No Resp.	Usually	Sometimes	Seldom	No Resp.
Wording								
E1	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
E2	62.5%	25.0%	0.0%	12.5%	40.0%	60.0%	0.0%	0.0%
E3a	62.5%	37.5%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
E3b	75.0%	12.5%	0.0%	12.5%	90.0%	10.0%	0.0%	0.0%
E3c	87.5%	12.5%	0.0%	0.0%	70.0%	30.0%	0.0%	0.0%
E3d	87.5%	0.0%	0.0%	12.5%	100.0%	0.0%	0.0%	0.0%
E3e	87.5%	0.0%	0.0%	12.5%	80.0%	20.0%	0.0%	0.0%
E3f	75.0%	25.0%	0.0%	0.0%	70.0%	30.0%	0.0%	0.0%
E3g	87.5%	12.5%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
E3h	37.5%	62.5%	0.0%	0.0%	40.0%	60.0%	0.0%	0.0%
E3i	75.0%	25.0%	0.0%	0.0%	70.0%	30.0%	0.0%	0.0%
E3j	37.5%	50.0%	12.5%	0.0%	40.0%	40.0%	20.0%	0.0%
Order of Items								
F1a	100.0%	0.0%	0.0%	0.0%	60.0%	40.0%	0.0%	0.0%
F1b	100.0%	0.0%	0.0%	0.0%	80.0%	20.0%	0.0%	0.0%
F1c	75.0%	12.5%	0.0%	12.5%	90.0%	10.0%	0.0%	0.0%
F1d	100.0%	0.0%	0.0%	0.0%	90.0%	10.0%	0.0%	0.0%
F1e	100.0%	0.0%	0.0%	0.0%	90.0%	10.0%	0.0%	0.0%
F2	50.0%	37.5%	12.5%	0.0%	50.0%	50.0%	0.0%	0.0%
F3	50.0%	37.5%	12.5%	0.0%	60.0%	40.0%	0.0%	0.0%
F4	100.0%	0.0%	0.0%	0.0%	60.0%	30.0%	10.0%	0.0%
F5	100.0%	0.0%	0.0%	0.0%	80.0%	20.0%	0.0%	0.0%
F6	100.0%	0.0%	0.0%	0.0%	90.0%	10.0%	0.0%	0.0%
F7a	75.0%	25.0%	0.0%	0.0%	70.0%	30.0%	0.0%	0.0%
F7b	100.0%	0.0%	0.0%	0.0%	70.0%	30.0%	0.0%	0.0%
F7c	100.0%	0.0%	0.0%	0.0%	50.0%	50.0%	0.0%	0.0%
F7d	87.5%	12.5%	0.0%	0.0%	80.0%	20.0%	0.0%	0.0%
F8	75.0%	12.5%	0.0%	12.5%	90.0%	10.0%	0.0%	0.0%
Item Format								
G1	62.5%	25.0%	0.0%	12.5%	50.0%	40.0%	10.0%	0.0%
G2	75.0%	12.5%	0.0%	12.5%	40.0%	30.0%	20.0%	10.0%
G3	75.0%	12.5%	0.0%	12.5%	90.0%	0.0%	0.0%	10.0%
G4	75.0%	12.5%	0.0%	12.5%	30.0%	50.0%	20.0%	0.0%
G5	62.5%	12.5%	12.5%	12.5%	40.0%	30.0%	30.0%	0.0%
G6	50.0%	37.5%	0.0%	12.5%	90.0%	10.0%	0.0%	0.0%
G7	62.5%	25.0%	0.0%	12.5%	80.0%	20.0%	0.0%	0.0%
G8	75.0%	0.0%	0.0%	25.0%	80.0%	20.0%	0.0%	0.0%
G9	87.5%	0.0%	0.0%	12.5%	90.0%	10.0%	0.0%	0.0%
G10	75.0%	0.0%	0.0%	25.0%	70.0%	30.0%	0.0%	0.0%
G11	87.5%	0.0%	0.0%	12.5%	90.0%	10.0%	0.0%	0.0%
G12	62.5%	25.0%	0.0%	12.5%	70.0%	30.0%	0.0%	0.0%
G13	62.5%	0.0%	0.0%	37.5%	80.0%	10.0%	0.0%	10.0%
G14a	50.0%	37.5%	0.0%	12.5%	60.0%	20.0%	10.0%	10.0%
G14b	75.0%	12.5%	0.0%	12.5%	100.0%	0.0%	0.0%	0.0%
G14c	62.5%	12.5%	0.0%	25.0%	40.0%	40.0%	0.0%	20.0%
OVERALL	77.4%	15.5%	2.6%	4.4%	70.6%	23.5%	4.1%	1.7%

DESIRABLE CHARACTERISTICS

OF MAIL QUESTIONNAIRES

INSTRUCTIONS: *Listed on the following pages are some generally agreed upon characteristics of effective mail questionnaires. Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:*

USUALLY *= usually or always recommended for mail survey questionnaires*
SOMETIMES *= sometimes recommended for mail survey questionnaires*
SELDOM *= seldom or never recommended for mail survey questionnaires*

Comments may be added at the bottom of pages on which items appear.

JUDITH A. BOSER

The University of Tennessee

SHELDON B. CLARK

Oak Ridge Associated Universities

NOTE: QUESTIONNAIRE PAGE WAS 7" BY 8½" FOR ACTUAL INSTRUMENT.

Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:

USUALLY = *usually or always recommended*

SOMETIMES = *sometimes recommended*

SELDOM = *seldom or never recommended*

A. General Appearance

1.	The title of the study/questionnaire is likely to appeal to the survey population	USUALLY	SOMETIMES	SELDOM
2.	Instrument looks easy to complete	USUALLY	SOMETIMES	SELDOM
3.	Margins are adequate; instrument doesn't look crowded	USUALLY	SOMETIMES	SELDOM
4.	Paper is white or light-colored with dark ink	USUALLY	SOMETIMES	SELDOM
5.	Printing does not bleed through paper	USUALLY	SOMETIMES	SELDOM
6.	Type is clear and legible	USUALLY	SOMETIMES	SELDOM
7.	Size and style of type used for headings is consistent throughout the instrument. Consistency is also evident for items and response options	USUALLY	SOMETIMES	SELDOM
8.	There are not too many variations in size and style of type	USUALLY	SOMETIMES	SELDOM
9.	The front page (or cover) contains:			
	a. the study/instrument title, prominently displayed	USUALLY	SOMETIMES	SELDOM
	b. general directions	USUALLY	SOMETIMES	SELDOM
	c. the name of the sponsor	USUALLY	SOMETIMES	SELDOM
	d. the address of the sponsor	USUALLY	SOMETIMES	SELDOM
10.	For a multi-page questionnaire, the back page does not contain items but may be used for comments	USUALLY	SOMETIMES	SELDOM
11.	Appreciation for completing the instrument is expressed	USUALLY	SOMETIMES	SELDOM

Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:

USUALLY = *usually or always recommended*

SOMETIMES = *sometimes recommended*

SELDOM = *seldom or never recommended*

B. Instructions

1.	General instructions that apply to the entire instrument are provided at the beginning of the instrument	USUALLY	SOMETIMES	SELDOM
2.	Instructions are brief	USUALLY	SOMETIMES	SELDOM
3.	Instructions are clear:			
	a. They specify when to put a check mark and when to write in a response	USUALLY	SOMETIMES	SELDOM
	b. They indicate whether multiple responses are allowed	USUALLY	SOMETIMES	SELDOM
	c. They provide guidance for expected length of open-ended responses	USUALLY	SOMETIMES	SELDOM
4.	Instructions are visually different from the body of the instrument (e.g., in size and/or style of type)	USUALLY	SOMETIMES	SELDOM
5.	The tone of the directions is polite (e.g., "please")	USUALLY	SOMETIMES	SELDOM
6.	If items appear on both sides of the page, an indication is given hat the instrument continues on the reverse side (e.g., "please turn over")	USUALLY	SOMETIMES	SELDOM

C. Choice of Items

1.	The respondent is able to provide answers to the questions in the instrument	USUALLY	SOMETIMES	SELDOM
2.	Each item seeks just one piece of information	USUALLY	SOMETIMES	SELDOM
3..	All items are essential and relevant to the purposes of the survey	USUALLY	SOMETIMES	SELDOM
4.	For items used for skip/filter/screen purposes:			
	a. The use of this type is justified	USUALLY	SOMETIMES	SELDOM
	b. Instructions are few and simple	USUALLY	SOMETIMES	SELDOM
	c. Instructions appear immediately after the response options	USUALLY	SOMETIMES	SELDOM
	d. Items pertaining to only some of the respondents are indented beneath the filter question	USUALLY	SOMETIMES	SELDOM

Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:
***USUALLY** = usually or always recommended*
***SOMETIMES** = sometimes recommended*
***SELDOM** = seldom or never recommended*

D. Choice of Response Options

1. Response options:
   - a. exhaust all possibilities or include "other," "undecided," or "neutral" category..... USUALLY SOMETIMES SELDOM
   - b. are mutually exclusive..... USUALLY SOMETIMES SELDOM
   - c. include a "don't know" option..... USUALLY SOMETIMES SELDOM
   - d. do not contain more than one alternative that could be correct unless multiple responses are allowed..... USUALLY SOMETIMES SELDOM
   - e. include both sides of issue in question..... USUALLY SOMETIMES SELDOM
   - f. are brief..... USUALLY SOMETIMES SELDOM
   - g. are appropriate for the item..... USUALLY SOMETIMES SELDOM
2. Items with Likert-type response options:
   - a. have an appropriately labeled midpoint..... USUALLY SOMETIMES SELDOM
   - b. use a balanced scale..... USUALLY SOMETIMES SELDOM
3. Sensitive information (e.g., age, salary) is collected using ranges for response options..... USUALLY SOMETIMES SELDOM

Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:

USUALLY = *usually or always recommended*

SOMETIMES = *sometimes recommended*

SELDOM = *seldom or never recommended*

E. Wording

1. The choice of words is appropriate to the literacy level of the survey population..... USUALLY SOMETIMES SELDOM

2. Both sides of an issue (or neither side) are included in the item stem..... USUALLY SOMETIMES SELDOM

3. Items are simple, direct, and unambiguous. They do not contain instances of any of the following pitfalls:

   a. jargon, technical terms, or uncommon abbreviations..... USUALLY SOMETIMES SELDOM

   b. "loaded" items (that use emotionally colored words)..... USUALLY SOMETIMES SELDOM

   c. assumption of an existing state of affairs (e.g., "Do you still..")..... USUALLY SOMETIMES SELDOM

   d. double negatives in items and/or response options..... USUALLY SOMETIMES SELDOM

   e. negatively worded items coupled with agree/disagree response format..... USUALLY SOMETIMES SELDOM

   f. qualifying clauses, especially at end of stem..... USUALLY SOMETIMES SELDOM

   g. "giveaway" words (e.g., "all")..... USUALLY SOMETIMES SELDOM

   h. inexact words or phrases (e.g., "any," "most," "several," "usually," "often," "regularly," "much the same")..... USUALLY SOMETIMES SELDOM

   i. vague terminology (e.g., "the country," "just," "fair," "you")..... USUALLY SOMETIMES SELDOM

   j. the word "questionnaire" or "checklist" in heading or text..... USUALLY SOMETIMES SELDOM

Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:

USUALLY = *usually or always recommended*

SOMETIMES = *sometimes recommended*

SELDOM = *seldom or never recommended*

F. Order of Items

1. The initial items are:
   - a. clearly connected to the stated purpose of the survey..... USUALLY SOMETIMES SELDOM
   - b. applicable to all members of the survey population..... USUALLY SOMETIMES SELDOM
   - c. easy..... USUALLY SOMETIMES SELDOM
   - d. nonthreatening..... USUALLY SOMETIMES SELDOM
   - e. interesting..... USUALLY SOMETIMES SELDOM
2. If there are any sensitive or difficult items, they appear in the middle or near the end of the instrument, but not at the very end..... USUALLY SOMETIMES SELDOM
3. Open-ended items appear last..... USUALLY SOMETIMES SELDOM
4. Classification or demographic information is solicited at the end of the instrument unless needed for screening purposes..... USUALLY SOMETIMES SELDOM
5. If reference is made to a previous item, that item appears on the same page or on the facing page..... USUALLY SOMETIMES SELDOM
6. Items with similar content are grouped together; within each content group, items with the same response format are presented together..... USUALLY SOMETIMES SELDOM
7. Within a topic/content area, the items progress from:
   - a. general to specific..... USUALLY SOMETIMES SELDOM
   - b. most familiar to least familiar..... USUALLY SOMETIMES SELDOM
   - c. least objectionable to most objectionable..... USUALLY SOMETIMES SELDOM
   - d. objective to subjective..... USUALLY SOMETIMES SELDOM
8. Items that require recall are organized by logical time sequence..... USUALLY SOMETIMES SELDOM

Please indicate the relative importance of each characteristic for mail survey questionnaires by circling your response to the right of the item on the following basis:

USUALLY = *usually or always recommended*

SOMETIMES = *sometimes recommended*

SELDOM = *seldom or never recommended*

G. Item Format

1.	Items are numbered with Arabic numerals	USUALLY	SOMETIMES	SELDOM
2.	If necessary, either sublettering (e.g., 4a, 4b, 4c) or numbering by sections (i.e., starting each section with item 1) is used to limit the apparent number of items	USUALLY	SOMETIMES	SELDOM
3.	Each item and its response options are on the same page	USUALLY	SOMETIMES	SELDOM
4.	Statements or questions, rather than phrases, are used in collecting demographic information (e.g., "How old were you on your last birthday?" instead of "Age")	USUALLY	SOMETIMES	SELDOM
5.	If an item stem requires two or more lines, the second and subsequent lines are indented	USUALLY	SOMETIMES	SELDOM
6.	The respondent is asked to circle or underline responses already presented rather than write them on a blank	USUALLY	SOMETIMES	SELDOM
7.	When response options are provided (including, if appropriate, a response option of "other"), each response option has either a numeric or alphabetic code beside it	USUALLY	SOMETIMES	SELDOM
8.	Response options are arranged vertically (or in columns if several onsecutive items use the same response options)	USUALLY	SOMETIMES	SELDOM
9.	Response options are close to the item stem	USUALLY	SOMETIMES	SELDOM
10.	The space for responding to items is on the same side of the page throughout the instrument	USUALLY	SOMETIMES	SELDOM
11.	There is adequate space for responding	USUALLY	SOMETIMES	SELDOM
12.	Open-ended items are used sparingly	USUALLY	SOMETIMES	SELDOM
13.	When ranking, the number of items to be ranked is limited (e.g., three best and three worst)	USUALLY	SOMETIMES	SELDOM
14.	For checklists:			
	a. If long, a line is skipped after every three to dix items	USUALLY	SOMETIMES	SELDOM
	b. Column headings are carried over from one page to another	USUALLY	SOMETIMES	SELDOM
	c. Column headings are presented parallel, rather than perpendicular, to the item stem	USUALLY	SOMETIMES	SELDOM

(Please continue to page 8)

Demographic Information

Please provide answers to the following questions regarding your background and experience in survey research activities.

1. How many years have you been involved in survey research activities?
   _____

2. How many mail surveys were you involved in conducting during 1988?
   _____

3. Would you consider 1988 a typical year in regard to your survey activities?
   _____Yes
   _____No, less than usual
   _____No, more than usual

4. Have you ever conducted and reported any studies of survey or questionnaire methodology to find more effective ways of conducting surveys?
   _____Yes
   _____No

5. Have you ever published an article or book on survey methodology or results of your research regarding survey methodology?
   _____Yes
   _____No

6. What type of mail surveys are you generally involved in?
   _____Consumer research
   _____Public opinion polls
   _____Institutional/organization research
   _____Other_____

7. What type(s) of population do you generally survey?
   _____General public
   _____Alumni
   _____Program participants
   _____Users of a particular product
   _____Members of an organization or specific group, such as employees
   _____Other_____

8. What is the nature of your employment?
   _____College/University faculty
   _____Research Institute in a college/university
   _____Employed by large organization as part of research division or section
   _____Survey consultant (private enterprise)
   _____Other_____

Thank you for sharing your experience and expertise with us in this research.

Please return to Judy Boser, The University of Tennessee, 212 Claxton, Knoxville, TN 37996.